

**APPENDIX A**

**Photographs of Existing Conditions  
and Visual Simulations  
with the Project**

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KVP 1 Existing View: View to the northeast on Q Street at the intersection with 11th Street in Merced.  
The elevated SR 99 and supporting berm are visible within this residential neighborhood.



KVP 1 Simulated View: The HST on retained fill is visible above and beyond the embankment of SR 99.

**Figure A-1**  
Key View Point 1



KVP 2 Existing View: View to the southwest from N Street, near Main Street, in downtown Merced. Beyond and near the Tioga Building is the northern alternative location for the Downtown Merced Station.



KVP 2 Simulated View: The elevated HST guideway on retained fill would be visible from the downtown Merced historic district.

**Figure A-2**  
Key View Point 2



KVP 3 Existing View: View to the south and the intersection of R Street and West 16th Street and the at-grade crossing of the UPRR in downtown Merced.



KVP 3 Simulated View: This is a representative location where the HST on retained fill might cross over a street north of the Downtown Merced Station during Phase 2.

**Figure A-3**  
Key View Point 3



KVP 4 Existing View: Martin Luther King, Jr. Avenue and W Main Street intersection,  
looking south toward SR 99.



KVP 4 Simulated View: Simulation of Downtown Merced HST Station.

**Figure A-4**  
Key View Point 4



KVP 4A Existing View: View to north from SR 99 above MLK Avenue in downtown Merced.



KVP 4A Simulated View: The MLK Avenue overcrossing of the at-grade HST to the Castle Commerce Center HMF site (Phase 2 of the project), and the HST station and parking garage in downtown Merced.

**Figure A-4A**  
Key View Point 4A



KVP 5 Existing View: View from the northbound lane of SR 99 looking northwest toward the UPRR tracks.



KVP 5 Simulated View: The HST guideway approaching the Downtown Merced Station and platforms, shown in the distance.

**Figure A-5**  
Key View Point 5



KVP 6 Existing View: View to the south from the southbound lane of SR 99, between Merced and Chowchilla. This viewpoint is approximately 0.1 mile south of Le Grand Avenue.



KVP 6 Simulated View: The HST guideway would appear beyond the existing UPRR tracks.

**Figure A-6**  
Key View Point 6



KVP 7 Existing View: View to the northeast from a residential neighborhood in the northern part of Chowchilla. The UPRR and SR 99 are visible across the middle of this view.



KVP 7 Simulated View: The elevated HST guideway through Chowchilla would appear above the existing UPRR/SR 99 corridor in middle ground views.

**Figure A-7**  
Key View Point 7



KVP 8 Existing View: View to the northeast from the downtown Chowchilla gateway. The SR 233–SR 99 interchange is visible in the center of the view.



KVP 8 Simulated View: The elevated HST guideway would appear across the center of the view, above the SR 99–SR 233 interchange.

**Figure A-8**  
Key View Point 8



KVP 9 Existing View: View to the west toward the UPRR corridor and SR 99 from within Fairmead, a residential area between Chowchilla and Madera.



KVP 9 Simulated View: The elevated HST guideway, shown here with a tinted, transparent sound barrier, would appear in front of the existing UPRR/SR 99 corridor. If the at-grade Ave 24 Wye were selected as part of the project, it would appear between the elevated UPRR/SR 99 Alternative and the UPRR corridor.

**Figure A-9**  
Key View Point 9



KVP 10 Existing View: View to the northeast from Rotary Park along North Gateway Drive in the city of Madera. The existing UPRR tracks are visible in front of a residential neighborhood.



KVP 10 Simulated View: The elevated HST guideway, shown here with a tinted, transparent sound barrier, would appear above the existing UPRR tracks and Sharon Boulevard, east of the UPRR tracks.

**Figure A-10**  
Key View Point 10



KVP 11 Existing View: View to the northeast from the northern corner of the intersection of South Gateway Drive and West Yosemite Avenue in downtown Madera.



KVP 11 Simulated View: The elevated HST guideway, shown here with a tinted, transparent sound barrier, would appear above and adjacent to the existing UPRR corridor.

**Figure A-11**  
Key View Point 11



KVP 12 Existing View: View to the southwest from 11th Street, northeast of South D Street, in the city of Madera. This part of the city, located south of downtown Madera, is primarily residential.



KVP 12 Simulated View: The elevated HST guideway, shown here with a tinted, transparent sound barrier, would appear above and adjacent to the existing UPRR tracks.

**Figure A-12**  
Key View Point 12



KVP 13 Existing View: View to the north from the northbound lane of SR 99, between Madera and Fresno. The existing UPRR tracks are visible in the foreground.



KVP 13 Simulated View: The at-grade HST guideway would appear parallel to the existing UPRR tracks.

**Figure A-13**  
Key View Point 13



KVP 14 Existing View: View to the northeast from the northbound lane of the SR 99 bridge over the San Joaquin River. Camp Pashayan is visible beyond the UPRR bridge.



KVP 14 Simulated View: The HST bridge would appear beyond the existing UPRR bridge in the view from SR 99.

**Figure A-14**  
Key View Point 14

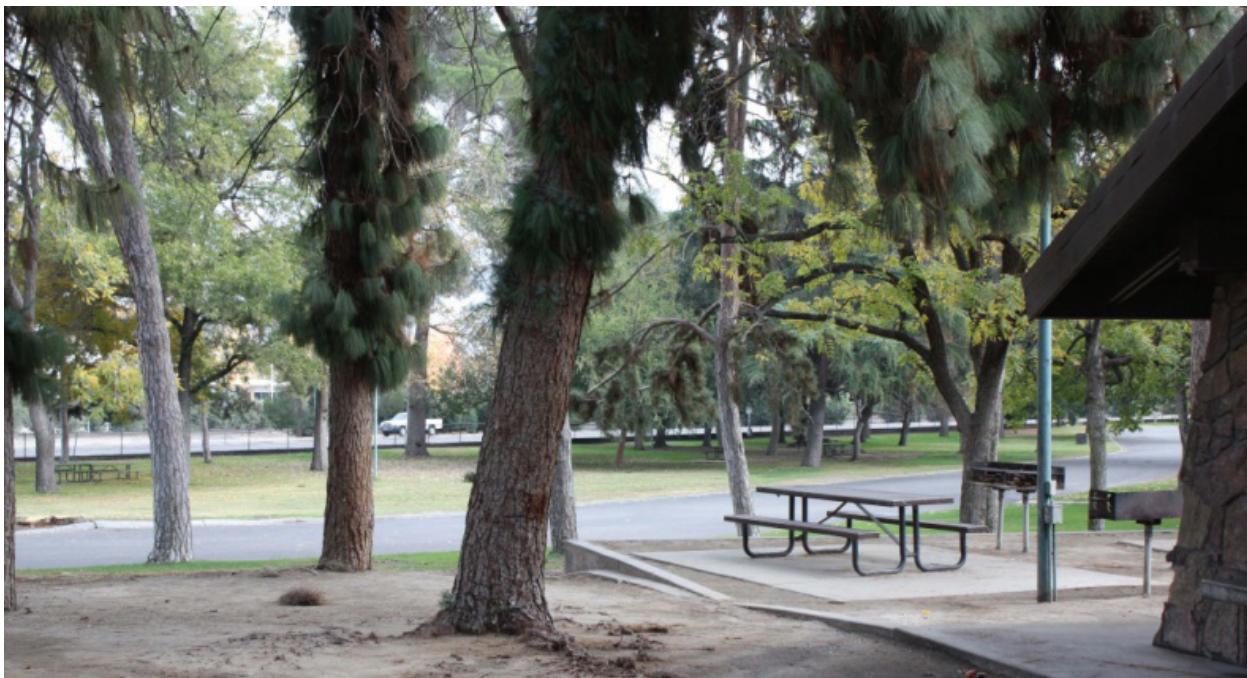


KVP 15 Existing View: View to the west from the gazebo within Camp Pashayan. Both SR 99 and the existing UPRR bridges across the San Joaquin River are visible.

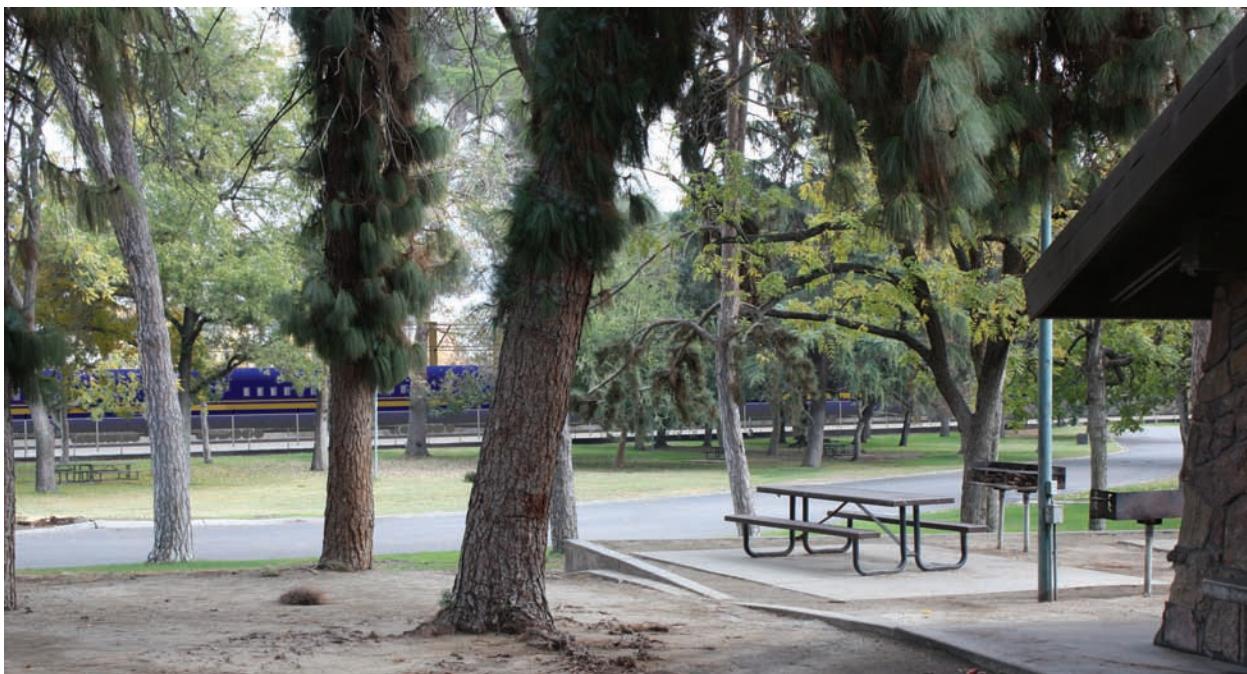


KVP 15 Simulated View: The HST bridge would appear in front of the existing bridges that are visible from Camp Pashayan.

**Figure A-15**  
Key View Point 15



KVP 16 Existing View: View to the east from within Roeding Park in the city of Fresno. Golden State Boulevard and the existing UPRR tracks are visible beyond the eastern edge of the park.



KVP 16 Simulated View: The at-grade HST would appear outside the eastern boundary of Roeding Park.

**Figure A 16**  
Key View Point 16



KVP 17 Existing View: View to the south from North Vagedes Avenue within a residential neighborhood in Fresno. North Weber Avenue is visible at the end of North Vagedes Avenue. The existing UPRR tracks are located beyond the hedgerow along North Weber Avenue.



KVP 17 Simulated View: The HST guideway would be in a cut below-grade, essentially not visible (except the top of the catenary) as it passed by this residential area neighborhood, west of North Weber Avenue.

**Figure A-17**  
Key View Point 17



KVP 18 Existing View: View to the west from the main plaza at the western entrance to Chukchansi Park in Fresno, near the intersection of Tulare and H Streets. The historical Southern Pacific Depot is visible toward the area proposed for the Mariposa Street station alternative in Downtown Fresno.



KVP 18 Simulated View: Mariposa Street station from approximately the same position as the existing view.

**Figure A-18**  
Key View Point 18



KVP 19 Existing View: View to the south from the ticket office at Chukchansi Park, near the intersection of H and Kern Streets in Fresno, toward the area proposed for the Kern Street Station Alternative. The western edge of the ballpark is visible along the left side of the view, and parking and warehouse uses typical of the area are visible across H Street, in the general location of a Downtown Fresno Station location option.



KVP 19 Simulated View: Kern Street station from approximately the same position as the existing view.

**Figure A-19**  
Key View Point 19



KVP 20 Existing View: View to the east from the eastbound lane of Avenue 21, between Road 15½ and Road 16.



KVP 20 Simulated View: The Ave 21 Wye design option would be at-grade in this area but would require construction of overpasses, such as this one for Road 16.

**Figure A-20**  
Key View Point 20



KVP 21 Existing View: View to the southeast from Chowchilla Boulevard near Avenue 23½. The SR 99 overpass of the UPRR tracks is visible in the distance.



KVP 21 Simulated View: The UPRR/SR 99 Alternative and the Ave 21 Wye are visible in this view.

**Figure A-21**  
Key View Point 21



KVP 22 Existing View: View to the east from the eastbound lane of SR 152, west of Road 18. The SR 152–SR 99 interchange is beyond the cluster of trees along the horizon.



KVP 22 Simulated View: The Ave 24 Wye would be elevated in this area.

**Figure A-22**  
Key View Point 22



KVP 23 Existing View: View to the northeast toward the BNSF Alternative from the northbound lane of SR 99, south of Merced.



KVP 23 Simulated View: This view shows the Mission Ave design option.

**Figure A-23**  
Key View Point 23



KVP 24 Existing View: View to the east from East Mariposa Way, west of South Burchell Avenue. The southern alternative of the Mariposa design option would pass through the intersection of East Mariposa Way and South Burchell Avenue.



KVP 24 Simulated View: The at-grade wye guideway would require an elevated T-intersection, similar to the one shown.

**Figure A-24**  
Key View Point 24



KVP 25 Existing View: View to the northeast from within a residential neighborhood in Le Grand. The Black Rock Milling Company industrial site is visible beyond the residences near the end of the street.



KVP 25 Simulated View: The Black Rock Milling Company would be mostly visible with the HST project.

**Figure A-25**  
Key View Point 25



KVP 26 Existing View: View to the east from Buchanan Hollow Road, west of Santa Fe Avenue. The Sierra Nevada Mountains are visible along the horizon.



KVP 26 Simulated View: The at-grade guideway would require raised road crossings and elevated intersections, as shown here, which would partially block views of the Sierra Nevada Mountains.

**Figure A-26**  
Key View Point 26



KVP 27 Existing View: View to the northeast from Avenue 18 $\frac{3}{4}$ , southwest of Old Mill Way, within a residential neighborhood in Madera Acres. The existing BNSF tracks are visible beyond Old Mill Way.



KVP 27 Simulated View: One of the three elevated wye options with sound barrier and the at-grade BNSF or Hybrid Alternative guideway with sound barrier would appear in front of the existing BNSF tracks.

**Figure A-27**  
Key View Point 27



KVP 28 Existing View: View to the east from the Avenue 7 overpass of SR 99. The variety of agricultural crops visible from this location is typical of the surrounding landscape.



KVP 28 Simulated View: The at-grade BNSF Alternative would be crossed over by Avenue 7 at this viewpoint, and would join the elevated UPRR/SR 99 Alternative approximately 1 mile south of this location.

**Figure A-28**  
Key View Point 28



KVP 29 Existing View: View to the north along Road 19½. Avenue 24 is approximately 0.2 mile in front of the viewpoint.



KVP 29 Simulated View: The elevated Ave 24 Wye would be on retained fill as it crosses Road 19½, which would be closed. The Ave 24 Wye would still be at-grade approximately 360 feet to the east (right).

**Figure A-29**  
Key View Point 29

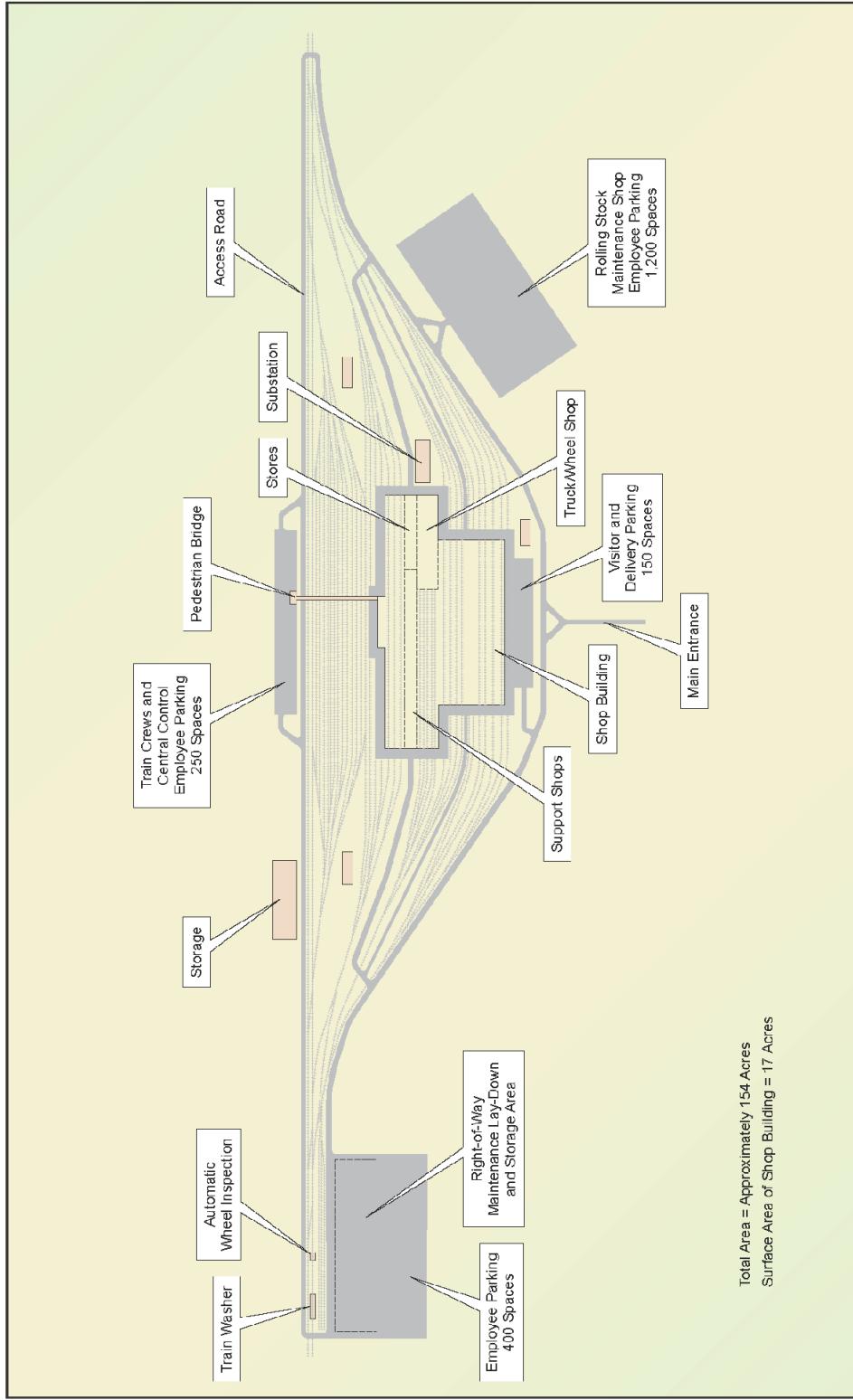


KVP 30 Existing View: View to the east from Avenue 19, near Pickfair Way along the northern edge of Madera Acres. Dry Creek Canal is visible on the north side of the road.



KVP 30 Simulated View: The BNSF Alternative would be at-grade and would be behind the elevated guideway of the Ave 24 Wye (shown with a tinted, transparent sound barrier) crossing above Avenue 19.

**Figure A-30**  
Key View Point 30



Typical HMF Layout



**Figure A-31**  
KVP 31: Looking toward the Castle Commerce Center HMF site.



**Figure A-32**  
KVP 32: This viewpoint in the southeast Atwater area became irrelevant and is only included to maintain the continuity of the numbered KVPs.



**Figure A-33**  
KVP 33: Looking toward the Harris-DeJager HMF site.



**Figure A-34**  
KVP 34: Looking toward the Fagundes HMF site.



**Figure A-35**  
KVP 35: Looking toward the Gordon-Shaw HMF site.



**Figure A-36**  
KVP 36: Looking toward the Kojima Development HMF site.



**APPENDIX B**

**Federal Highway Administration  
Visual Quality Rating Sheet**

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Landscape Unit, KVP Location	KVP	View	Vividness					Intactness	Unity	Visual Quality Score <sup>a</sup>	Qualitative Rating
			Landform	Vegetation	Water	Human-Made	Overall				
<b>Merced Landscape Unit</b>											
Martin Luther King Jr. Ave. and W Main St.	KVP 4	Existing	2	3	N/A	4	3	3	3.5	3.2	Moderately low
		With Project	2	3	N/A	5	3.3	4	4	3.8	Moderate
SR 99 at E. 15th St.	KVP 5	Existing	2	3	N/A	3	2.7	3	3.5	3.0	Moderately low
		With Project	2	3	N/A	4	3	3.5	3.5	3.3	Moderately low
<b>Merced-Chowchilla Landscape Unit</b>											
SR 99	KVP 6	Existing	3	3	N/A	5	3.7	2	4	3.2	Moderately low
		With Project	3	2.5	N/A	4	3.2	2	3.5	2.9	Moderately low
<b>Chowchilla Landscape Unit</b>											
North Chowchilla	KVP 7	Existing	6	4	5.5	3	4.6	4.5	5	4.7	Moderately high
		With Project	2	4	5.5	2	3.4	3	4	3.5	Moderate
Robertson Blvd	KVP 8	Existing	3	4.5	N/A	2	3.2	3	4	3.4	Moderately low
		With Project	3	4	N/A	2	3	2.5	4	3.2	Moderately low
<b>Chowchilla-Madera Landscape Unit</b>											
Fairmead	KVP 9	Existing	3	3	N/A	4	3.3	2	3	2.8	Moderately low
		With Project	3	3	N/A	2	2.7	1.5	1.5	1.9	Low
<b>Madera Landscape Unit</b>											
Rotary Park	KVP 10	Existing	2	4.5	N/A	2	2.8	2	4	2.9	Moderately low
		With Project	2	4.5	N/A	2	2.8	2	3.5	2.8	Moderately low
W Yosemite Ave	KVP 11	Existing	2	3	N/A	4.5	3.2	2	4	3.1	Moderately low

Landscape Unit, KVP Location	KVP	View	Vividness					Intactness	Unity	Visual Quality Score <sup>a</sup>	Qualitative Rating
			Landform	Vegetation	Water	Human-Made	Overall				
		With Project	2	4	N/A	2	2.7	1.5	3	2.4	Low
E 11th St	KVP 12	Existing	2	3	N/A	3.5	2.8	2	3	2.6	Moderately low
		With Project	2	3	N/A	3	2.7	1.5	1.5	1.9	Low
<b>Madera-Fresno Landscape Unit</b>											
SR 99	KVP 13	Existing	2.5	2.5	N/A	1.5	2.2	3	2	2.4	Low
		With Project	2.5	1.5	N/A	3	2.3	4	4	3.4	Moderately low
<b>Fresno Landscape Unit</b>											
San Joaquin River	KVP 14	Existing	5	5	5	1	4	1.5	1.5	2.3	Low
		With Project	5	5	5	1	4	1	1.5	2.2	Low
Camp Pashayan	KVP 15	Existing	4	5.5	N/A	2	3.8	3	4	3.6	Moderate
		With Project	4	5.5	N/A	1	3.5	2.5	3	3	Moderately low
Roeding Park	KVP 16	Existing	3	6.5	N/A	5.5	5	3	5	4.3	Moderate
		With Project	3	6.5	N/A	5	4.8	2.5	4	3.8	Moderate
North Vagedes Avenue	KVP 17	Existing	2	5.5	N/A	4	3.8	5.5	6	5.1	Moderately high
		With Project	2	5.5	N/A	4	3.8	5.5	6	5.1	Moderately high
Chukchansi Park (Mariposa St Station)	KVP 18	Existing	2	1.5	N/A	1.5	1.7	1.5	2	1.7	Low
		With Project	2	3.5	N/A	5	3.5	3	3	3.2	Moderately low
Chukchansi Park (Kern St Station)	KVP 19	Existing	2	2.5	N/A	3	2.5	2	2	2.2	Low
		With Project	2	3.5	N/A	5	3.5	3	3	3.2	Moderately low
<b>West of SR 99 Landscape Unit</b>											
Avenue 21	KVP 20	Existing	3	5	4	3	3.8	3	4	3.6	Moderate
		With Project	3	2	4	1.5	2.6	1.5	2	2	Low

Landscape Unit, KVP Location	KVP	View	Vividness					Intactness	Unity	Visual Quality Score <sup>a</sup>	Qualitative Rating
			Landform	Vegetation	Water	Human-Made	Overall				
Chowchilla Blvd	KVP 21	Existing	3	4.5	N/A	2	3.2	3	2.5	2.9	Moderately low
		With Project	3	4	N/A	1	2.7	2.5	2	2.4	Low
SR 152	KVP 22	Existing	2	3	N/A	2	2.3	3	3	2.8	Moderately low
		With Project	2	2.5	N/A	1.5	2	1	2.5	1.8	Low
<b>Merced-Le Grand Landscape Unit</b>											
SR 99	KVP 23	Existing	6	5	N/A	3	4.7	3	4	3.9	Moderate
		With Project	6	4.5	N/A	1.5	4	2	2	2.7	Moderately low
East Mariposa Way	KVP 24	Existing	3	5	N/A	3	3.7	3.5	5	4.1	Moderate
		With Project	3	3	N/A	1	2.3	3.5	3	2.9	Moderately low
<b>Le Grand Landscape Unit</b>											
Marshall St	KVP 25	Existing	2	3.5	N/A	2.5	2.7	4	3	3.2	Moderately low
		With Project	2	3.5	N/A	1	2.2	2	1.5	1.9	Low
<b>Le Grand-Madera Acres Landscape Unit</b>											
Buchanan Hollow Road	KVP 26	Existing	6.5	6	N/A	3	5.2	4	5	4.7	Moderately high
		With Project	2	1	N/A	1	1.3	2	3.5	2.3	Low
<b>Madera Acres Landscape Unit</b>											
Avenue 18 <sup>3/4</sup>	KVP 27	Existing	3	3	N/A	3	3	3	4	3.3	Moderately low
		With Project	3	2	N/A	1.5	2.2	1.5	2	1.9	Low
<b>Madera Acres-SR 99 Landscape Unit</b>											
Avenue 7	KVP 28	Existing	4	6	N/A	4	4.7	5	6	5.4	Moderately high
		With Project	3	4	N/A	4	3.7	3	5	3.9	Moderate

Landscape Unit, KVP Location	KVP	View	Vividness					Intactness	Unity	Visual Quality Score <sup>a</sup>	Qualitative Rating
			Landform	Vegetation	Water	Human-Made	Overall				
<b>East of SR 99 Landscape Unit</b>											
Road 19½	KVP 29	Existing	3	3.5	N/A	3.5	3.3	4	3	3.4	Moderately low
		With Project	3	3.5	N/A	3	3.2	2	3	2.7	Moderately low
Avenue 19	KVP 30	Existing	3	4	N/A	3.5	3.5	4.5	3.5	3.8	Moderate
		With Project	3	3.5	N/A	2	2.8	2	2	2.3	Low
<b>HMF Sites Landscape Unit <sup>c</sup></b>											
Q St (Castle Comm. Center)	KVP 1	Existing	2	5	N/A	4	3.7	3.5	5.5	4.2	Moderate
		With Project	2	5	N/A	4	3.7	3.3	5	4	Moderate
N St (Castle Comm. Center)	KVP 2	Existing	2	5.5	N/A	5	4.2	3.5	5	4.2	Moderate
		With Project	2	5.5	N/A	5	4.2	3	4.5	3.9	Moderate
R St (Castle Comm. Center)	KVP 3	Existing	2	2	N/A	2	2.7	3	3.5	3.1	Moderately low
		With Project	2	2	N/A	2	2.7	3	2.5	2.7	Moderately low
SR 99 and Martin Luther King Jr. Way (Castle Comm. Center)	KVP 4A	Existing	2	4	N/A	5	3.6	4	4	3.9	Moderate
		With Project	2	3	N/A	4	3	3	3	3	Moderately low
Santa Fe Ave (Castle Com. Center)	KVP 31	Existing	3	3	N/A	3	3	5	4	4	Moderate
		With Project	3	2	N/A	4	3	4	4	3.6	Moderate
Franklin Rd	KVP 32	Existing	3	4.5	N/A	3	3.5	3	2.5	3	Moderately low
	N/A <sup>b</sup>	With Project	--	--	--	--	--	--	--	--	--

Landscape Unit, KVP Location	KVP	View	Vividness					Intactness	Unity	Visual Quality Score <sup>a</sup>	Qualitative Rating
			Landform	Vegetation	Water	Human-Made	Overall				
SR 99 (Harris-DeJager)	KVP 33	Existing	3	4.5	N/A	2.5	3.3	4	3.5	3.6	Moderate
		With Project	3	3	N/A	3	3	3	3	3	Moderately low
SR 152 (Fagundes)	KVP 34	Existing	3	5	N/A	4	4.3	4.5	4	4.4	Moderate
		With Project	3	3	N/A	4.5	3.5	3	3	3.1	Moderately low
Avenue 18 ½ (Gordon-Shaw)	KVP 35	Existing	3	4	N/A	3.5	3.5	5.5	4.5	4.5	Moderately high
		With Project	3	3	N/A	4	3.3	5	3	3.7	Moderate
Santa Fe Ave (Kojima Development)	KVP 36	Existing	3	6	N/A	4	4.3	5	6	5.1	Moderately high
		With Project	3	4	N/A	4.5	3.8	3	4.5	3.8	Moderate

<sup>a</sup> Numerical scores are associated with qualitative ratings as follows: 1 = Very low; 2 = Low; 3 = Moderately low; 4 = Moderate; 5 = Moderately high; 6 = High; 7 = Very high --- NA = Not applicable

<sup>b</sup> Not applicable because the view does not include the HST branch line to the Castle Commerce Center HMF site.



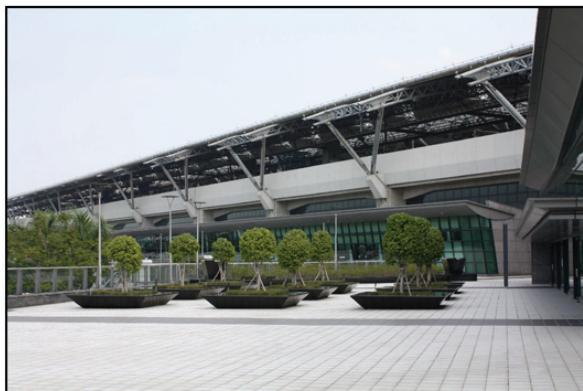
**APPENDIX C**

## **Functional and Iconic High-Speed Train Station Examples**

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## Functional High-Speed Train Station Examples



## Iconic High-Speed Train Station Examples

